ABSTRACT

Methods and apparatus are disclosed for using barrier phases to synchronize processes and components in a packet switching system, including, for example, but not limited to the use of barrier phases in the coordinated timing of the sending of information (e.g., flow control information) within a packet switching system, and the use of barrier phases in a packet sequence number windowing protocol. In one implementation, elements are assigned to one of multiple ordered sets of a barrier groups, wherein each element of a barrier group must be set to a common barrier state before any element of a next a barrier group can switch to a next barrier state, and once all elements of a particular barrier group switch to a new barrier state, all the elements of the next barrier group begin to switch to the next barrier state.